



United States
Department of
Agriculture

Forest
Service

September 2020



Yette Project

Decision Notice Finding of No Significant Impact

Bradford Ranger District, Allegheny National Forest

Hamilton Township

Lots: 11, 19, 20, 21, 22, 23, 122, 123, 127, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147 Warrants: 3087, 3121, 3404, 4911, 4312, 4915, 4916, 5571, 5574, 5577

Hamlin Township

Warrants: 3076, 3077, 3084, 3085, 3086, 3089, 3091, 3399

Lafayette Township:

Lots: 10, 11, 12, 13, 14, 16, 17, 18, 19, 20

Warrants: 2244, 2245, 3076, 3084, 3399, 3402, 3404, 3408, 3410, 3413, 3414, 3431, 3432, 3433, 3435

Wetmore Township

Lot: 182

Warrants: 3086, 3087, 3091, 3092, 3121

Warren County, Pennsylvania

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Table of Contents

Reasons for the Decision	4
Purpose and Need	4
Decision	5
Decision Rationale	10
Other Alternatives Considered	11
Public Involvement	11
Finding Of No Significant Impact (FONSI)	11
Consistency with the Land and Resource Management Plan	14
National Environmental Policy Act (NEPA)	14
Findings by Other Laws and Regulation	15
Administrative Review	16
Contact	17
Appendix 1. References	18
Appendix 2. Proposed Treatments by Compartment/Stand	19

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Reasons for the Decision

This Decision Notice and Finding of No Significant Impact documents the Forest Service decision and rationale for authorizing the Proposed Action (Alternative 1) on National Forest System (NFS) lands for the Yette Project. It implements management actions for timber harvesting, reforestation activities, stream restoration, fishery and wildlife habitat improvements, non-native invasive plant species treatments, and transportation activities within the 29,410-acre project area, located near Marshburg, Pennsylvania. The project area consists of 28,518 acres of National Forest System (NFS) lands and 892 acres of privately owned land (Map 1)¹. Work will take place over a 20-year period. The decision is provided on the attached maps, 2 through 4.

The Forest Service completed the Yette Project environmental assessment (EA) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Decision Notice incorporates by reference the Yette EA, available at web link: <http://www.fs.usda.gov/project/?project=57537>

The project implements the Allegheny National Forest (ANF) Land and Resource Management Plan (Forest Plan) and Record of Decision (ROD) (USDA FS 2007a), and the ANF Final Environmental Impact Statement (FEIS) (USDA FS 2007b). The proposed actions are designed to move the area towards the desired condition as outlined in the Forest Plan.

Forest Plan management areas (MAs) occur on NFS lands within the project area: MA 2.1 (574.4 acres), MA 2.2 (5,455.8 acres), MA 3.0 (22,425 acres) and MA 7.1 (62.2 acres). Desired conditions for MA 2.1 are for uneven-aged northern or upland hardwood stands with inclusions of conifer, shrub, and herbaceous openings. The area contains mostly large trees with small inclusions of seedlings and saplings (Forest Plan, pages 106 to 108). Desired conditions for MA 2.2 are for older, late structural forests that link relatively large areas of older forests (core areas) across the landscape (Forest Plan, pages 109 to 112). The desired conditions for MA 3.0 are for even-aged management that provides a mixed forest of predominantly shade intolerant and mid-tolerant hardwood stands of various ages and associated understories, and habitat for a diversity of plant and animal species (Forest Plan, pages 113 to 116). The desired conditions for MA 7.1 are for large-scale developed recreation areas in a rural setting. This management area is primarily used in the summer months and often provides a destination for visitors to use as a staging area for participating in other day use activities (Forest Plan, pages 133 to 136).

Purpose and Need

Details of the project purpose and need are provided on pages 1 to 5 in the Yette EA. The following statements summarize the project's purpose and need, linking these statements to the Forest Plan.

- Provide a diversity of vegetation patterns across the landscape that represents well distributed habitats, a range of forest age classes and vegetative stages, a variety of healthy functioning vegetation layers, moderate to well-stocked forest cover, and the variety of vegetation species or forest types necessary to achieve multiple resource objectives and sustain ecosystem health (Forest Plan, page 14);
- Continue to implement and monitor a range of silvicultural and reforestation practices in order to be responsive to emerging issues and regenerate stands to a diversity of tree seedlings of good quality, form and health (Forest Plan, page 14); and,
- Ensure that a healthy, diverse, resilient, and well stocked forest is provided in light of several concurrent forest health threats (Forest Plan, pages 14, 15, and 21).
- Enhance wildlife habitat on 1,200 to 1,600 acres each year to provide desired cover and forage conditions (Forest Plan, page 20).

¹ No activities are proposed on private lands in the project area.

- Restore and enhance stream processes and aquatic habitat diversity for brook trout and other headwater stream fishes (Forest Plan, pages 14, 20, 22, 46, and 80).
- Provide a safe, efficient and economical transportation system that is responsive to public and administrative needs, while having minimal adverse effects on the natural forest ecosystem (Forest Plan, page 16)

Decision

I am the responsible Forest Service Official for this decision to authorize the Proposed Action (Alternative 1). I have considered the analysis of issues and alternatives contained in the EA for this project, ANF Forest Plan and FEIS for lands administered by the ANF, and applicable laws.

This decision is applicable to the purpose and need statements for the Yette project provided above and in detail on pages 1 to 5 of the Yette EA. After reviewing the analysis and supporting documents, I approve implementation of the proposed action (Alternative 1) described in the EA on pages 5 to 10 and the attached maps 2-4.

My decision and findings are based on the Yette Project EA, including Appendix A – Forest Plan standards and guidelines applicable to the project, other resource analyses prepared to support the EA (project record), and the Forest Plan documents. The Forest Plan, Appendix A provides the rationale for choice of vegetation management practices. My decision approves the following actions:

Silvicultural Treatments on 3,706 acres. Descriptions of silvicultural treatments are provided in the Forest Plan, pages 64 to 69 and A-18 to A-26. Appendix A of this decision includes a stand specific description of proposed treatments.

Table 1. Yette silvicultural treatments by management area (MA)²

MA	Treatment	Acres
2.2	Group selection to restore understory mature forest conditions.	364
	Two-aged harvest.	118
3.0	Shelterwood/removal cut with reserves.	1813
	Site preparation/final harvest.	1200
	Two-aged harvest.	211

Reforestation treatments for all vegetation proposals, but implemented on a site-specific basis (Map 2). Reforestation treatments are described in the Forest Plan, pages 70 to 72 and A-30 to A-36. Acres proposed for reforestation are at the maximum and would likely be less based on the need during implementation.

Table 2. Reforestation actions and acres proposed within the Yette Project area.

Treatment	Acres
Site Preparation, herbicide, weed and release, fence, and plant ³	3706
Fertilizer	1383

Regenerating declining or poorly stocked stands to vigorous well-stocked stands using a variety of timber harvest and reforestation treatments would help to sustain ecosystem resilience and biodiversity in the project area, in the long term. In some areas, regeneration harvests combined with past and other previously approved regeneration harvests would create temporary openings that would exceed 40 acres

² See Map 1 in the Environmental Assessment for the locations of treatments.

³ Manual cutting of interfering vegetation

in size (Table 3). Early-aged stands are considered temporary openings until dominant and co-dominant trees have reached a height of 15 feet (Forest Plan, p. 68). Forest Plan standards and guidelines would be followed for temporary openings created by the application of even-aged silviculture (USDA-FS 2007, p.68). For example, regeneration proposed in MA 2.2 are proposed for a two-aged or uneven- aged treatments to achieve MA desired conditions.

Table 3. Proposed temporary openings (blocks) that would exceed 40 acres by management area (MA).

Block	MA	Stands	Acres
1	3.0	456023	45
2	2.2 and 3.0	457020, 457026(BEABR)	92
3	2.2 and 3.0	456007, 456008, 456026(BEABR), 456027, 456029, 456038(BEABR), 456041(BEABR), 457002(BEABR), 457008, 457009, 457012, 457013, 457014(UK), 457019(UK), 457027(BEABR), 457028(BEABR), 45703, 457032, 457033(BEABR), 457040, 457041(BEABR), 457042(UK), 458022, 458026(UK), 458039(UK)	561
4	3.0	458028(BEABR), 458033(BEABR), 458037	74
5	2.2	458020(BEABR), 458045(BEABR)	88
6	3.0	476027, 476029(BS), 476041(BEABR), 476044(BEABR), 477005, 477011, 477014, 477016, 477031, 477034	217
7	3.0	477038(UK), 477046	56
8	3.0	480019, 480037, 480053(BS), 480056(BS), 480064, 483026	222
9	3.1	480021	40
10	3.0	480013(UK), 480020(UK), 480054, 480062, 480072(UK)	144
11	3.0	481037(UK), 481045(UK)	69
12	3.0	480015, 481009, 481029, 481034, 481041, 481046, 481053, 481054, 482008, 482019, 482027, 482029, 482042, 482045, 483011, 483029, 483030, 483032, 483035, 483036, 483043, 483042, 482049(BEABR), 481038(UK), 482034(UK), 483010(UK), 483018(UK), 482010(BS), 482021(BS), 482025(BS), 483014(BS), 483015(BS), 483017(BS), 483020(BS), 483040(BS), 483047(BS)	993
13	3.0	484011, 484013, 484016, 484018, 484020, 484021, 484022, 484023, 484037, 484056, 484057, 484018(BS)	371
14	3.0	485011, 485014, 485015, 485025(ES), 485026	100
15	3.0	474006, 474009, 474033	81
16	3.0	474008, 474011(UK), 474012, 474039, 474054, 474055	95
17	3.0	472001(BS), 472004(UK), 472006(UK), 472039	78
18	3.0	472037, 472038	50
19	3.0	464001, 464002, 464003, 464004, 464005, 464028, 464030, 465003, 465004, 465005, 465016	423
20	3.0	462004(UK), 462005(UK), 462007, 462045, 462051, 462052, 462027(UK), 462053(UK), 463004, 463007, 463009, 463020(BEABR), 463023, 463024(UK), 463040, 463042, 463044(UK)	420
21	3.0	463006(UK), 463014(BEABR), 463015(BEABR), 463037(BEABR)	64
22	3.0	461010, 461033(UK), 461036, 461037, 461041, 461045, 461047, 461049, 461050, 461051, 461062	253
23	3.0	462044	40
24	3.0	462019(UK), 462021, 462030, 462047	143
25	2.2 and 3.0	460003, 460004, 460006(UK), 460007, 460008(UK), 460009, 460019, 460021(UK), 460029(UK), 460029, 460053, 460054(UK),	748

Block	MA	Stands	Acres
		460055(UK), 460057, 460062, 460066(UK), 460067, 460069, 460070, 461015, 461016, 461017, 461034, 461035, 461060	
26	3.0	460030, 460044, 460061	130
27	3.0	460014, 460024, 460042, 460042(UK), 460068	160
28	3.0	459020, 459049(UK)	47
Bradford Emerald Ash Borer Remediation EA (BEABR), Upper Kinzua EA (UK), Blacksnake EA (BS), Eastside EIS (ES)			

Nonnative invasive plant treatments on 1,200 acres of the project area.

Table 4. Nonnative invasive plants treatments for the Yette project area (Map 2).

Treatment	Acres ⁴
Combinations of manual treatments (pulling, digging, or hand-roughing), mechanical treatments (brush-cutting, mowing, or removal by motorized equipment), and herbicide treatments (glyphosate, sulfometuron methyl, or both), as needed.	1,200

Wildlife habitat improvement activities on 71 acres of the project area.

Table 5. Wildlife habitat improvements.

Treatment	Compartment/Stand	Acres
Mow strips, plant soft mast producing trees & shrubs along with conifer groups, add individual fences and crib fences, replace and/or remove damaged fences and plantings where needed, prune existing fruit trees, till/lime/fertilize/seed all areas where possible with warm season grass & forb mix, and install a variety of new nesting boxes.	457/34; 458/38; 460/25,39,48; 461/30,48; 462/49; 463/28,30; 474/50,51,52; 477/9,28; 480/23; 481/16; 483/7,9,46; 484/25	72
Plant soft mast producing shrubs, soft mast producing trees, and conifer groups, add individual fences and crib fences, till/lime/fertilize/seed areas where possible with warm season grass & forb mix, and install a variety of nesting boxes. In 477/16, expand out from .12 acre opening in order to create 2.0 acre opening. Opening is abandoned, overgrown, and capped OGM site. Access to site is grown in.	460/30,61; 477/16	5.25
Under plant 10% of stands with shrubs (service berry, spice bush, chokeberry, elderberry) and groups of white pine.	460/29; 462/30,52; 474/9,12,33; 477/16; 481/15,54; 483/13,29,35; 484/16	52
Release 40 to 50 large mast producing hophornbeam within 0.3 acre area located in 461/35. Release and reserve 0.5 acre to 2.0 acre groups of seedling and sapling stage eastern hemlock within remainder of stands listed.	460/42,53,67; 461/16,35; 477/46; 483/30	8
Enhance existing vernal pool by enlarging the pool surface area. Conduct pool enhancement late summer early fall when young herptiles are mobile. Restore adjacent opening around vernal pool with soft mast producing shrub species that favor wet sites.	483/13	0.75

⁴ Additional infestations and species from the ANF Invasive Plant Species of Concern list will be treated if found within the project area, and consistent with applicable Forest Plan direction.

Water Resources and Fishery Habitat improvements on 45.27 stream miles.

Stream restoration

160 trees per mile will be felled into streams and onto floodplains. By doing so, stream processes such as ground water infiltration, discharge rates, and low flow rates as well as large wood functions such as creating pools, adding protective cover, trapping and sorting of spawning gravel can be restored or improved. (Table 6).

Table 6. Stream and fishery habitat proposed treatments.

Treatment	Stream Miles
Level 1: Fell trees into streams and move into place by grip hoist or winch.	34.1
Level 2: Combination of chainsaws with winching the logs and tops with a grip hoist/other equipment to place in the stream.	6.6
Level 3: Excavators will be used to dig up root wads from the uplands and place these root wads and logs into the designated sections.	0.57

This project will also improve pH and alkalinity in at least 4 miles of streams in the project area. These streams in the Mead Run area are susceptible to acid precipitation due to their location, shallow soils and parent geology with low buffering capacity. A lime application will be added to soils where stormflow will travel to streams and improve alkalinity. This treatment would improve water quality and conditions for aquatic organisms in perennial streams in the Mead Run watershed.

Transportation improvements on 25.5 miles of road.

Table 7: Transportation Improvement

Road Activity ⁵	Total Mileage	Proposed ⁶ / Existing Road Numbers (Miles)			
Add Existing Non-System Corridor to National Forest Transportation System (which may involve road reconstruction, construction, and/or realignment) ¹	2.3	FR 187CA			0.3
		FR 313AA			0.8
		FR 478B			0.4
		FR 628 Extension			0.4
		FR 630			0.4
Previously Approved - Add Existing Non-System Corridor to National Forest Transportation System	1.6	FR 142BC			0.6
		FR 318 Extension			1.0
Road Decommissioning - Includes NFS Road and non-system road/corridors	16.0	FR 457			0.3
		Non-System Roads			15.7
Long Skid on Existing Corridor	0.3	Non-System Roads			0.3
Proposed Road Management Changes	5.3	Road Number	Existing Status	Proposed Status	Miles
		FR 142B	Closed	Restricted	1.3
		FR 142BA	Closed	Restricted	0.6
		FR 142BB	Closed	Restricted	0.2

⁵ In addition to these changes, failing culverts will be identified, prioritized and replaced.

⁶ Proposed Forest Road numbers

		FR 142C	Closed	Restricted
		FR 456B	Closed	Restricted
		FR 456C	Closed	Restricted
				1.0
				1.2
				1.0

Trees that pose as a road hazard (diseased, dead, dying, or excessively leaning trees) would be felled and merchantable hazard trees would be harvested along roads of the project area. Equipment would remain on improved road surfaces. Hazard trees not accessible from roads would be cut and left on the site.

Site-specific mitigations for the project are included in the EA on pages 11 and 12.

All timber units were field reviewed. Resource specialists' notes were compiled into a spreadsheet and were reviewed/discussed by the Interdisciplinary Team and the Decision Maker. These discussions resulted in this list of site-specific mitigations that respond to local resource concerns and are above and beyond the standards and guidelines in the Forest Plan.

Site specific mitigation measures, applied to the proposed action, are measures to reduce or avoid project related impacts. The Forest Plan provides design criteria applicable to all ANF actions (USDA FS 2007a, b). Specific Forest Plan direction related to the proposed action is located in Appendix A. Best management practices applicable to this project are provided in the References section of this EA. Mitigation measures, specific to the Yette Project, are as follows:

Recreation

- As appropriate, implement design features from the Allegheny National Forest Scenery Implementation Guide (2009).
- Through news releases, website messages, district office postings, and other public contacts, notify the public of road, trail, or area closings.
- As a part of timber sale agreements, require commercial operators to post warnings of heavy truck traffic on open Forest Roads and post trail closures at those unit boundaries where trails enter a stand being actively worked.
- Felling, skidding, stacking, and hauling should not occur on weekends or holidays.
- The North Country National Scenic trail should have a 150' buffer on either side of the centerline of the trail where no timber will be cut.
- Stands surrounding the trail will be marked on the side facing away from the trail.
- Crossing of trail by equipment and materials will be kept to the minimum necessary to accomplish the project objectives, and equipment and materials should not intrude upon the trail corridor when not in use.
- Tops felled into the trail corridor will be removed by the contractor and trail tread through any trail crossing will be repaired to a firm, dry surface.

Species with Viability Concerns

- To avoid impacting northern long-eared bats, roadside hazard tree removal activities would only take place between November 1 and March 31 unless a complete assessment is prepared in advance. (See Programmatic Biological Opinion on the Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions, page 7, conservation measure 2(a)).

Water Resources and Fisheries

- In the identified small watersheds that were predicted to exceed 25 percent reduction in basal area, the following would occur:
 - Stands would be prioritized for operation using the shelterwood system, in order to not exceed 25% of the watershed with a vegetation age of 0 to 5 years of age.
- Small watersheds would be monitored by comparing the acreage of proposed harvest to the size of the watershed to ensure that forested land is composed of less than 25% in the 0 to 5 year age

class.

- In addition, water quality monitoring and brook trout monitoring would occur on a subset of these watersheds to determine any impacts or response.

Decision Rationale

My decision will authorize the proposed action (Alternative 1) and allow implementation within the Yette project decision area in a manner consistent with the approved authorized action. The decision will be implemented over a twenty-year period. Given the scope and timeframe of implementing the project, and when added to other past, present, and reasonably foreseeable future actions (Environmental Consequences, EA, pages 12 to 45), the project will not have significant impacts or significant cumulative impacts on the environment. The overall effects of implementing the proposed action (Alternative 1) are anticipated to improve forest health and promote sustainability within the project area. In making this decision, I considered the following factors:

- Is the project consistent with strategies described in the Forest Plan which are relevant and specific to the affected resources and resource concerns?
- Is the project consistent with the rationale for choice of vegetation management practices (described in terms of appropriateness and optimality in the Forest Plan; Appendix A)?
- Does the project incorporate all relevant design criteria, consistent with Forest Plan standards and guidelines and can be implemented with limited adverse impacts and would not impair the overall long-term productivity of NFS lands?
- Does the project meet the purpose and need of the project?
- Has the project been developed through public involvement and coordination with our publics, partners, adjacent landowners, and other agencies?
- Is the project consistent with other Federal policy?
- Is the project typical of other multiple use management projects on the Bradford Ranger District based on the size of the project area, size of individual treatment areas, scope of activities, duration of implementation, and prescribed methods?

Conclusions and recommendations in the ANF Monitoring Report for fiscal years (FY) 2008 to 2013 (USDA-Forest Service 2014) further support the purpose and need and proposed action for the project. As of the end of the FY 2013 ANF Forest Plan monitoring effort, early structural forest habitat has declined from approximately 8% of the forested landscape to 3.4% since the start the Forest Plan implementation (Page 68). The desired condition of early structural habitat created by timber harvest or natural disturbance is 10% to 12% of the forested landscape (Forest Plan Errata).

Even-aged and uneven aged regeneration harvests have been lower than Forest Plan objectives. Landscape-level desired vegetative structural stages and age classes would not be sustained at levels sufficient to meet desired Forest Plan conditions (Forest Plan, page 121).

In addition, invasive insects and disease continue to be the most significant threats to the health of forests on the ANF. The ANF FY 2008 – FY 2013 Monitoring and Evaluation Report recommends enhancing the diversity of forest vegetation in terms of composition and structure in order to improve the resiliency of the forest and reduce the level of impact from insects and diseases (USDA FS 2014, page 185). The Yette project area is experiencing an outbreak of diseases and nonnative insects, including black cherry decline, beech bark disease, and emerald ash borer infestation. Future tree impacts are anticipated with the onset of the hemlock wooly adelgid and spotted lanternfly. In the Yette project area, there is a decline in overstory tree stocking levels. Natural tree regeneration will be affected by insect and disease threats, and combined with deer population impacts without action. To promote healthy stands that are more resilient to insects and diseases, stands will be regenerated before further stocking levels decline and while tree seed crops are still available.

Considering all of these factors, I am confident that the proposed action (Alternative 1) is well-grounded in the Forest Plan as a guiding document, current and consistent with recommendations from the FY2008-FY2013 Monitoring Report, and all of the elements of the proposed action are responsive to the purpose and need for action.

Other Alternatives Considered

In addition to the proposed action, Alternative 1, I considered one other alternative (no action, Alternative 2). A comparison of these alternatives can be found in the EA on pages 11 and 12. Under the no action alternative, current management plans continue to guide management of the project area with none of the proposed actions approved. Alternative 2 does not meet the purpose and need for action, nor is it consistent with the ANF Forest Plan.

Public Involvement

Public Scoping Period

This proposal was first listed in the Allegheny National Forest Schedule of Proposed Actions in January 2020. This quarterly publication is available on the ANF website at the Forest Service web link: <https://www.fs.usda.gov/project/?project=57537>. On January 31, 2020, a scoping proposal explaining the purpose and need for action, as well as the locations and types of proposed activities, was mailed to local governments and individuals and organizations who have expressed a desire to be notified about current projects. On February 12, a news release (FY201914) was provided to media outlets.

Scoping Comments and Forest Service (FS) Response Summary

No scoping comments were received for this project.

Opportunity to Comment on EA

The Forest Service published a legal notice in *The Bradford Era* (Bradford, Pennsylvania) on Monday, July 1, 2020, page B7 for the release of the Yette EA and the opportunity to comment. The EA was posted under the "Analysis" tab at the Forest Service web link provided under the public scoping period heading.

EA Comments and Response Summary

No comments on the Yette EA were received.

Tribal Consultation

The ANF consulted with tribal representatives from 14 Tribes during the public scoping period for the Yette Project. Tribal consultation for this project will continue throughout the planning process.

Cultural Resource and Endangered Species Act Consultations

The Forest Service has initiated consultation with the State Historic Preservation Office (PA SHPO), in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 Code of Federal Regulations Part 800) of the Advisory Council on Historic Preservation. All cultural sites will be flagged and avoided during project implementation.

The Forest Service will consult with the U.S. Fish and Wildlife Service (PA Field Office), in accordance with the Endangered Species Act of 1973, as amended. Guidance provided will be implemented.

Finding Of No Significant Impact (FONSI)

I have reviewed the Council on Environmental Quality Regulations for significance (40 CFR 1508.27) and have determined that this decision is not a major federal action that would significantly affect the quality of the human environment, either individually or cumulatively. Preparation of an EIS pursuant to Section 102 (2) (c) of the National Environmental Policy Act of 1969 is not required. This determination is based on the following factors as outlined in 40 CFR 1508.27.

Context

Based on the large size of the ANF, approximately 517,000 acres, and the comparatively small percentage of the area proposed for timber harvesting (approximately 13% of the project area and less than 0.75% of the ANF), stream and aquatic habitat improvements, nonnative invasive plant treatments, and transportation actions in this project, impacts, both in the short and long term, are not significant. The Yette project does not establish precedent for any future projects on the Forest.

The context of this proposal is to implement management actions within the Yette project area. The record indicates that even in a local context, this proposal will not pose significant short- or long-term effects. The ANF Forest Plan standards and guidelines, project design features, including the site specific design criteria in Appendix A of the EA and Pennsylvania best management practices, will minimize and avoid adverse impacts. Future projects will be analyzed in context with the activities as proposed or implemented under cumulative effects analyses (EA, pages 16 to 54).

The size and nature of the Cherry Run Project is typical of other multiple-use management projects on the Bradford Ranger District. This Project does not involve unusual or unique treatments or methods. The effects of the common silvicultural treatments used here have been observed in past actions and are well-documented in monitoring reports and field work.

Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits.

My finding of no significant impact is based on the context of the project and intensity of effects using the following ten factors identified in 40 CFR 1508.27(b).

1) Impacts may be both beneficial and adverse.

Both beneficial and adverse effects have been considered in the analysis. Benefits of this project were not used to offset adverse impacts, and adverse impacts of this project are not significant even when separated from benefits. The analyses documented in the Environmental Consequences of the EA (pages 13 to 57) state that some direct and indirect effects are expected in the context of the analysis area. Mitigation measures will be applied to the proposed action to ensure that even direct and indirect effects to these resources will not be significant. None of the direct and indirect effects are expected to result in any significant cumulative effects. Effects of the proposed action (Alternative 1) are addressed for public health or safety, unique characteristics of the geographic area, uncertainty, precedent for future action, resource effects analysis for vegetation (silviculture and invasive plants), hydrology, aquatic habitat, and recreation direct, indirect and cumulative effects, respectively, cultural resources, threatened, endangered, and sensitive species, migratory birds and federal, state, or local laws. Specialist reports, and project reference documents support the EA conclusions.

2) The degree to which the proposed action affects public health or safety.

Implementation of this project will not cause any significant effects to public health and safety (EA, pages 14 to 15).

3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

No parklands, floodplains, wetlands, wild and scenic rivers, or ecologically critical areas will be adversely affected by implementing Alternative 1 (EA, pages 15, 16).

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

“Controversial” in this context refers to cases where substantial scientific dispute exists as to the size, nature, or effects of a major Federal action on some human environmental factor, rather than to public opposition of a proposed action or alternative. The effects on the quality of the human environment are not likely to be highly controversial. Controversy is described as a dispute concerning the effects of the action amongst the scientific community. Public opposition to a proposed action is not an indicator of controversy, nor is the length of a NEPA document evidence of controversy as it is defined in the CEQ NEPA regulations. Based on the regulatory definition, there is no substantial dispute among the scientific community as to the size, nature, or effects of implementing Alternative 1 on the various biological and physical environments (EA, pages 11 to 57). The size of the project and the nature of the treatments are not uncommon for projects on the Bradford Ranger District. The effects of this type of action have been studied (from past projects) for at least a decade. Monitoring information concerning effects and mitigation effectiveness was a key part of the analysis for this proposal. The interdisciplinary team applied the best available scientific information and considered opposing viewpoints. The conclusions of these local resource experts are set forth in the EA effects discussion. There is no evidence in the record of a substantial scientific dispute as to effects of the proposal.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The effects disclosed in this EA are not highly uncertain and do not involve unique or unknown risks (EA, page 16). The ANF Forest Plan provides for maintaining a diversity of plant and animal communities that will enhance the resiliency of the forest to respond to these changing conditions. This project is tiered to the 2007 ANF FEIS. We have considerable experience with the types of activities to be implemented. Treatments proposed for this project constitute well-established methods for vegetation management; timber harvesting; reforesting stands; enhancing stream habitat; treating nonnative invasive plants; constructing, reconstructing, and maintaining roads; improving recreation; and protecting water quality, wildlife and rare plants. Much is known regarding the outcomes when using even-aged management on the ANF. Outcomes from using uneven-aged management, such as those proposed in MA 2.2 are less certain. Consequently, the ANF Forest Plan (USDA 20007a, ROD, pages 26, 50) places an emphasis on monitoring these treatments and a flexible adaptive approach to vegetation management (Forest Plan ROD, page 22). The effects analysis shows the known effects, and the proposal does not involve unique or unknown risks (EA, pages 11 to 57).

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

Alternative 1 does not establish a precedent for future actions or represent a decision in principle about future management considerations. Any future decisions will need to consider all relevant scientific and site-specific information available at that time. Implementing Alternative 1 is within the scope of the ANF Forest Plan and its supporting documents (USDA FS 2007) and associated supporting environmental documentation (EA and Yette project specialist reports).

7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Effects of past, present, and reasonably foreseeable land uses, along with the effects of Alternative 1, were considered in reaching my conclusion. This included projecting future levels of private oil and gas development [EA, pages 17 - 18 and OGM specialist report (project record)]. The effects of implementing the selected alternative do not individually, or with other activities taken cumulatively within the areas affected, reach a level of significance (EA, pages 11 to 57). CEQ guidance on cumulative effects was used to develop this analysis. The Forest used monitoring information, as well as data and information compiled during other NEPA processes, to inform the cumulative effects analysis.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects

listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

The project area was inventoried for heritage resources. Heritage resources were delineated and buffered for protection (EA, page 39). Survey results and a cultural report are provided in District Heritage records. No Native American Graves sites are known through surveys (heritage records), nor were any identified as a result of public scoping or consultation with tribal representatives (Heritage records). Consultation with tribes and the State Historic Preservation Office has concluded. No significant impacts will occur to cultural resources.

9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA).

The actions will have no effects on ANF federally listed ESA species (clubshell, northern riffleshell, rayed bean, snuffbox, sheepnose, rabbitsfoot, northern bulrush and small whorled pogonia) or its habitat that has been determined to be critical under the ESA (EA, page 52). The actions "May affect, likely to adversely affect" the threatened northern long eared bat and/or its habitat (EA, page 52). Formal consultation with the U.S. Fish and Wildlife Service (USFWS) has occurred. A concurrence letter from USFWS was received on August 13, 2020 and made part of the project record. The findings are based on the scope of the project, the EA analysis, Biological Assessments (project record) and design criteria (EA, Appendix A).

10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The actions will not violate federal, state, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA (EA, pages 55 to 57). The proposed action complies with federal, state, and local laws and requirements of protection of the environment, including the Clean Water Act, Wetlands and Floodplains Executive Orders, Endangered Species Act, National Historic Preservation Act, National Environmental Policy Act, and National Forest Management Act. The proposed action is consistent with the Forest Plan (pages 37, 75, 91, 103, 110, 114 and 144).

Consistency with the Land and Resource Management Plan

The National Forest Management Act (NFMA) requires that projects, including those that authorize use and occupancy on NFS lands, be consistent with the Forest Plan of the administrative unit where the project would occur. This decision to implement the proposed action is consistent with the intent of the Forest Plan's long term goals and objectives (USDA FS 2007). The analysis supports my determination that the project can be implemented without impairing the long-term productivity of NFS lands (Mitigation Measures, EA page 11, EA, pages 11 to 57, and EA, Appendix A). Measures to avoid or minimize potential effects are incorporated in this decision, and include Forest Plan standards and guidelines, which at a minimum, meet the requirements of applicable laws, regulations, and Pennsylvania state standards, for the affected NFS lands. For these reasons, I find the authorization aspect of this decision to be consistent with the NFMA.

National Environmental Policy Act (NEPA)

My review of the EA finds it meets the requirements of the NEPA, Council on Environmental Quality (40 CFR 1500-1508) and Forest Service regulations (36 CFR Part 220). Forest Service direction in implementing NEPA and CEQ regulations are contained in chapters 10 and 20 of Forest Service Handbook 1909.15 (Environmental Policy and Procedures). The scope of this decision is limited to NFS lands. The effects analysis in the EA for this project shows that the project can be implemented without impairing the long-term productivity of NFS lands (Cherry Run EA). The decision includes measures to avoid or minimize environmental harm including Forest Plan standards and guidelines, which at a minimum, meet all requirements of applicable laws, regulations, State standards, and additional standards and guidelines for the affected NFS lands. Potential adverse effects of the actions will be mitigated through conservation measures.

Findings by Other Laws and Regulation

Clean Air Act {42 U.S.C. §7401 et seq. (1970)}

Project area effects from the proposed action on the attainment of NAAQS are not expected to be significant (EA, page 55).

Clean Water Act {33 U.S.C. §1251 et seq. (1972)}

No significant effects to water quality standards are anticipated by implementing the proposed actions (EA, page 56).

Endangered species act (ESA) (1973) (16 U.S.C. 1531-1544, 87 Stat. 884), as amended

No significant effects to federally listed ESA species are anticipated by implementing the proposed actions. The Forest Service will consult with the USFWS for the northern long-eared bat and will apply any guidance received (EA, page 56).

Executive Order 13186 (January 10, 2001) (66 Federal Register 11, 2001) – Responsibilities of federal agencies to protect migratory birds

No impacts to migratory birds or migratory bird habitat are anticipated (EA, page 56).

Executive Order 12898 (59 Federal Register 7629, 1994) – Federal actions to address environmental justice in minority populations and low-income populations.

The impacts of Forest Plan implementation on minority and low-income populations were considered in the Forest Plan Final Environmental Impact Statement (pages 3-422 and 3-435), and public involvement specific to this project did not identify any adversely impacted minority or low-income populations (USDA FS 2007). As a result, my decision is not expected to adversely impact minority or low-income populations.

Executive Orders 11988 and 11990 (May 24, 1977) - Floodplains and Wetlands

This project does not propose wetland development or modifications. No significant effects are anticipated to wetlands in implementing the proposed action. Floodplains exist in the project area and will be temporarily affected while stream and fishery improvements are implemented through the addition of large woody material (Project Record). These treatments are expected to benefit floodplains by slowing water movement and increasing water infiltration. Pennsylvania best management practices and Forest Plan standards and guidelines will minimize any temporary effects. No significant effects to floodplains and wetlands are anticipated (EA pages 56 and 57).

Federal Cave Resources Protection Act {Public Law 100-691 (16 U.S.C. 4301 et seq.; 102 Stat. 4546)}

No known cave resources will be affected by this decision.

Forest Service Sensitive Species {NFMA and the Forest Service Manual (2670)}

Forest Service Regional Foresters developed the sensitive species lists for plants and animals for which population viability is a concern. On November 30, 2017, the Forest Service, Region 9, Regional

Forester approved species for which the population viability is a concern, which included 70 Regional Forester Sensitive Species (RFSS) listed for the ANF, while 23 species were removed from the 2012 RFSS list. Another ten species have been identified in the ANF Forest Plan as species having viability concerns (SVE). These species were evaluated in Biological Evaluations (project record). Treatments to improve forest health are anticipated to improve overall habitat for RFSS and SVE and are expected to be beneficial in the long term. Forest Plan standards and guidelines and/or site-specific mitigation measures will be implemented to conserve these species with suitable or occupied habitat on NFS lands. (EA, pages 52-54).

National Historic Preservation Act (Public Law 89-665; 54 U.S.C. 300101 et seq.)

The Pennsylvania State Historic Preservation Office concurred with the findings in the Cultural Resource Report prepared for this project. There are no districts, sites, highways, structures, or objects listed or eligible for listing, in the National Register of Historic Places or that the proposed actions may cause loss or destruction of scientific, cultural, or historical resources within the Alternative 1 action areas. No significant effects to cultural resources are anticipated with Alternative 1. Any sites of cultural interest identified within the proposed action locations will be flagged and avoided.

Wild and Scenic Rivers Act (Public Law 102-271)

There are no wild and scenic rivers that will be affected by Alternative 1 (EA, pages 15 and 57).

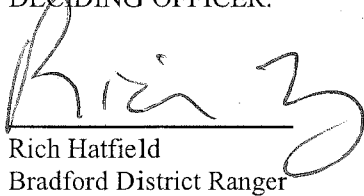
Administrative Review

This decision is not subject to an objection process under 36 C.F.R. part 218. All information in this decision was made available during the scoping and EA comment periods, and no comments were received.

Contact

For information regarding this decision please contact Rich Hatfield, Bradford District Ranger, Allegheny National Forest, 29 Forest Service Drive, Bradford, Pennsylvania, 16701, Phone: 814-363-6000, Email: richard.hatfield@usda.gov.

DECIDING OFFICER:


Rich Hatfield
Bradford District Ranger

Sept 19 2020
Date

Appendix 1. References

- McKinley, D.C., M.G. Ryan, R.A. Birdsey, C.P. Giardina, M.E. Harmon, L.S. Heath, *et al.* 2011. A synthesis of current knowledge on forests and carbon storage in the United States. *Ecological Applications* 21: 1902-1924.
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Appendix 2. Proposed Treatments by Compartment/Stand

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
456008	25	Site Prep / Final Harvest	X	X	X	X	X	
456027	7	Site Prep / Final Harvest	X	X	X	X	X	
456029	7	Site Prep / Final Harvest	X	X	X	X	X	
457008	11	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
457012	7	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
457013	45	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
457020	46	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
457030	10	Site Prep / Final Harvest	X	X	X	X	X	
457032	25	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
457040	59	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	
457042	34	Site Prep / Final Harvest	X	X	X	X	X	

⁷ Mechanical Site Prep

⁸ Chemical Site Prep

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
458022	61	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	
460003	54	Site Prep / Final Harvest	X	X	X	X	X	
460004	47	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	
460007	12	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460009	34	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460014	24	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460019	21	Site Prep / Final Harvest	X	X	X	X	X	
460029	105	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460030	94	Site Prep / Final Harvest	X	X	X	X	X	
460042	8	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
460042	24	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
460044	13	Site Prep / Final Harvest	X	X	X	X	X	
460053	14	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460057	33	Site Prep / Final Harvest	X	X	X	X	X	X
460061	24	Site Prep / Final Harvest	X	X	X	X	X	
460062	5	Site Prep / Final Harvest	X	X	X	X	X	
460067	52	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460068	22	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
460069	10	Site Prep / Final Harvest	X	X	X	X	X	X
460070	6	Site Prep / Final Harvest	X	X	X	X	X	X
461010	27	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
461016	60	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
461034	13	Site Prep / Final Harvest	X	X	X	X	X	X
461035	10	Site Prep / Final Harvest	X	X	X	X	X	X
461036	17	Site Prep / Final Harvest	X	X	X	X	X	
461037	10	Shelterwood Seed Cut / Shelterwood Removal Cut	X	X	X	X	X	

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
		with Reserves						
461045	30	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
461047	28	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
461050	23	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
461062	18	Site Prep / Final Harvest	X	X	X	X	X	
462030	73	Site Prep / Final Harvest	X	X	X	X	X	
462045	20	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
462047	7	Site Prep / Final Harvest	X	X	X	X	X	X
462051	43	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
462052	32	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
463004	13	Site Prep / Final Harvest	X	X	X	X	X	X
463007	24	Site Prep / Final Harvest	X	X	X	X	X	X
463009	14	Site Prep / Final Harvest	X	X	X	X	X	X
463023	20	Site Prep / Final Harvest	X	X	X	X	X	X

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
463042	11	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
464001	29	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
464002	54	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
464004	33	Site Prep / Final Harvest	X	X	X	X	X	
464005	76	Site Prep / Final Harvest	X	X	X	X	X	
464008	28	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
464018	17	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
464028	38	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
464030	5	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
465003	22	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
465005	71	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
465016	16	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
472036	29	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
472038	33	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
472039	27	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
474008	4	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	
474009	14	Site Prep / Final Harvest	X	X	X	X	X	X
474012	17	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	
474016	20	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
474033	34	Two-aged Shelterwood Seed Cut /	X	X	X	X	X	

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
		Two-aged Harvest						
474039	17	Site Prep / Final Harvest	X	X	X	X	X	
474056	5	Site Prep / Final Harvest	X	X	X	X	X	X
476020	31	Site Prep / Final Harvest	X	X	X	X	X	X
476027	12	Site Prep / Final Harvest	X	X	X	X	X	
477005	12	Site Prep / Final Harvest	X	X	X	X	X	X
477011	12	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
477014	30	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
477016	23	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
477024	13	Site Prep / Final Harvest	X	X	X	X	X	X
477031	15	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
477031	11	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	X
477034	14	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	X
477046	34	Site Prep / Final Harvest	X	X	X	X	X	
480019	61	Site Prep / Final Harvest	X	X	X	X	X	

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
480037	48	Site Prep / Final Harvest	X	X	X	X	X	
480064	9	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
481009	42	Site Prep / Final Harvest	X	X	X	X	X	X
481015	56	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
481029	12	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
481034	22	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
481041	5	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
481053	16	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
481054	40	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
482008	63	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
482019	23	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
482027	45	Site Prep / Final Harvest	X	X	X	X	X	
482029	26	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
482042	32	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
482045	38	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
483012	33	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
483029	28	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
483030	18	Two-aged Shelterwood Seed Cut / Two-aged Harvest	X	X	X	X	X	
483032	18	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
483035	33	Shelterwood Seed Cut / Shelterwood	X	X	X	X	X	X

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
		Removal Cut with Reserves						
483036	5	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
483042	14	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
483043	9	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	
484011	15	Site Prep / Final Harvest	X	X	X	X	X	X
484013	10	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
484016	43	Site Prep / Final Harvest	X	X	X	X	X	X
484020	45	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
484021	41	Site Prep / Final Harvest	X	X	X	X	X	X
484022	60	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
484023	20	Site Prep / Final Harvest	X	X	X	X	X	X
484029	25	Group Selection to Restore Understory Mature	X	X	X	X	X	X

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
		Forest Conditions						
484030	28	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484031	26	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484032	58	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484033	12	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484037	21	Site Prep / Final Harvest	X	X	X	X	X	X
484043	23	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	X
484045	25	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484046	32	Group Selection to Restore Understory Mature	X	X	X	X	X	

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
		Forest Conditions						
484047	13	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484048	23	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484049	34	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484052	21	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484054	12	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484055	31	Group Selection to Restore Understory Mature Forest Conditions	X	X	X	X	X	
484056	36	Site Prep / Final Harvest	X	X	X	X	X	X
484057	44	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X

Compartment and Stand	Acres	Treatment	MSP ⁷	CSP ⁸	Release	Fence	Planting	Fertilization
485011	9	Site Prep / Final Harvest	X	X	X	X	X	
485014	15	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	X
485015	19	Site Prep / Final Harvest	X	X	X	X	X	
485026	41	Shelterwood Seed Cut / Shelterwood Removal Cut with Reserves	X	X	X	X	X	